Subject Index

A

Abstinence signs 279
Activity 81
— patterns 317
Adrenal catecholamines 53
Adrenal medullary enzymes 53
α-Adrenergic antagonists 243
Affective illness 129
Aggression 75
Aggressor mice 53
Alcohol administration, chronic 219
Amitriptyline 185
Amphetamine 129, 199, 209, 265
— *d*-91, 285
— (+)- 175
— S- 169
Analgesia 213
Anticholinergic action 15
Anticonvulsants 39, 59
Anti-depressants, non-tricyclic 117
Anxiety 209
Apomorphine 1, 293
ATPase activity 219
Atropine 15
Attack stress 53
Automaintenance 285
Average evoked response 129
Avoidance
— active 65
— passive 65

B

Baboons 301
— photosensitive 59, 159
Barbiturate physical dependence 195
Beta blockers 39
Beta-yohimbine 209
BL 3912A 169
Brain stimulation 189
Brain subcellular distribution 141
Butaclamol 181

C

Caffeine 255
Carbidopa 81
Catecholamines 29, 293
Catecholamine synthesis, rates of 175
Catecholaminergic activity 117
Central stimulation 293
Cerebral spinal fluid 71
Chlordiazepoxide 153
Chlorimipramine 301
Chlorpromazine 101
Cholinergic activity 71
— mechanisms 43
Chronic administration 137
Chronic alcohol administration 219
Clondine 243, 293
Clozapine 15
Cocaine 125
Comparative behavior 137
Conditional avoidance response 9
Consolidation 255
Continuous performance test 85
Corynanthine 209
Cyclic GMP 71

D

DDC 65
Decerebrate 243
Depression 23
Diazepam 317
Digit symbol substitution test 85
Discrimination 91
Dopa 65
L-Dopa 1
— induced hyperkinesia 259
Dopamine 175, 181, 199
— hypothesis 71
— uptake inhibition 117
— receptors 205
— turnover 205
Doxepin 213
Drug-dependent learning 153
— interaction 29, 209, 213
— seeking behavior 235

E

EDR 101
EEG 101, 125
Emotions 153
Environment 273
Epilepsy 159
Escape learning 153
Ethanol 75, 293
— (alcohol) 29
— intake 289
— intoxication 219
Exploratory activity 165
— behavior 317

F

Facilitation of behavior 169
Fear 75
Ferrets 147
Fluoxetine 189
Flupenthixol 181
Food schedule 289
Functional disturbance 165

G

Growth hormone 1
Gustatory conditioning pretreatment effects 265

H

Habituation 165, 243
Haloperidol 15
Human subjects 1, 23, 29, 47, 71, 85, 101, 107, 129, 185, 259, 311
6-Hydroxydopamine 199
5-Hydroxytryptamine 189, 301
5-Hydroxytryptophan 159, 301
5-HT uptake inhibition 225

I

Imipramine 85, 185
Inbred mice 255
Intoxication human 29
Intraventricular 81

K

Key-pecking 285
Kynurenine-pathway metabolites 301

L

Learning 255, 273
Lesions 273
Lithium 129
Locomotor activity 169
Locus coeruleus 243
Long-term memory 23
Loxapine 107

M

Male rabbit 43
Mania 23
Maprotiline 159
Marijuana 311
Memory consolidation 65
— retrieval 153
Metabolites 117
Methamphetamine 273
(+)-Methamphetamine 137
3-Methoxy-4-hydroxyphenylglycol conjugates 47
Methysergide 189
Methylphenidate 165
Mice 39, 53, 75, 117, 137, 175, 195, 205, 209, 213, 225, 255, 293, 305
Monkeys
— rhesus 235
— squirrel 235
Morphine 39, 235, 265, 279
α MT 65

N

Naloxone 279
Narcotic antagonist 39
NA uptake inhibition 225
Neuroendocrine evidence 1
Neuroleptics 9, 107, 147, 205

Neuroleptic treatment 71
Nomifensine 85, 117, 159
Noradrenaline ascending neurons 199
— uptake inhibition 117
— mechanism 47
Norepinephrine 175
Normal volunteers 85

O

Operant behavior 289
Oral administration 125
Orientation 147

P

Parkinson's disease 259
Pentylenetetrazol seizures 175
PGO activity 301
Phenethylamine 199
Phenobarbital 53
Phentolamine 243
Physostigmine 23
Pigeons 285
Pigs 317
Pilocarpine 43
Piperoxane 243
Plasma level 59
Polarography 59
Polygraphy 101
Post-trial treatment 65
Predatory behavior 147
Prediction of neuroleptic response 1
Primates 59, 159, 301
Prolactin 181, 185
Propranolol 29, 39
Propoxyphene 213
Prose 311
Psychomotor 85

R

Rabbits 43
Rate-dependent 285
Rats 9, 15, 65, 81, 91, 125, 141, 153, 165, 169, 181, 189, 199, 219, 243, 265, 273, 279, 289
R-DOM 169
Recall, cued 311
Recovery 273
Retrieval 311
Retention 65

S

Schizophrenia 1, 71, 101
— chronic 47
— paranoid 107
SC-13504 59
Scopolamine 43
Second-order schedules 235
Self-administration 235
Self-stimulation 189
Sensitivity 101
Sensitization 243
Serial position 311
Serotonin 81, 159, 189
— uptake inhibition 117
Serotoninergic activity 117
Severity of illness 47
Sexual behavior 43
Short-term memory 23
Sleep 125, 301
Sociability 75
Sotalol 39
Startle 243
Stereotyped behavior 199
Stimulants 125
Storage 311
Strain differences 219
Supersensitivity 205

T

Tardive dyskinesias 15, 259
Δ^9 THC and metabolites 141
Thymoleptic effect 225
Time estimation 85
Timidity 75
Timing behavior 91
Tolerance 9, 165, 265
— development 141
— ethanol 219
— functional 195
Toxicity in mice 209
Transfer 153, 311
Tricyclic antidepressants 159, 185

U

Urinary excretion and brain metabolism 47

V

Vanillylmandelic acid 47
Victim mice 53

W

Withdrawal symptoms 195

Y

Yohimbine 209

Advice to Authors

The illustrations that will appear in your contribution will be shown to best advantage if you follow the brief set of instructions below. Please read carefully. Thank you.

The Publisher

Preparation of Line Drawings

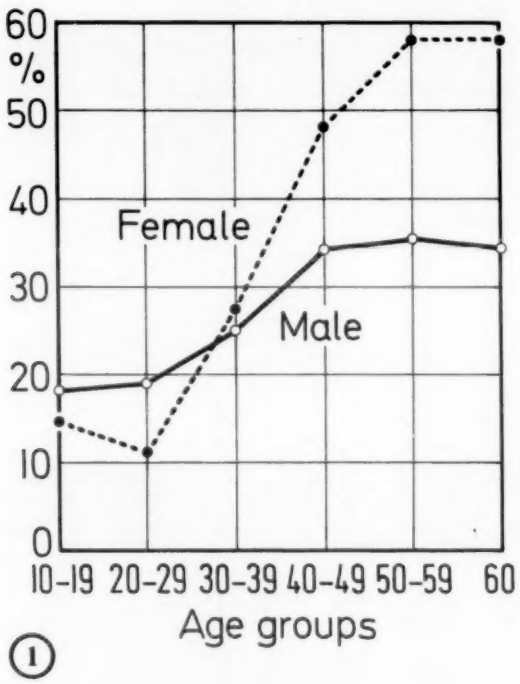
Illustration copy should be prepared to fit the format of the printed page (print area) so that 1 : 1 reproduction is possible. Where reduction is necessary, please state the desired scale.

Drawings are to be twice the final size and executed in indelible black ink.

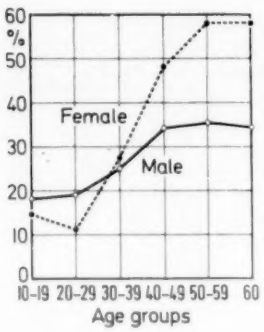
Important points to note: thickness of lines, size of inscriptions, size of measuring points, adequate spacing of shaded and dotted areas.

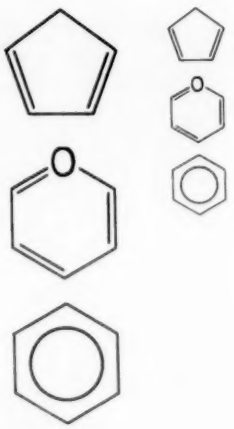
Words should be in upper and lower case characters, not CAPITALS.

The following are optimal sizes as they appear in the journal:
Capital letters and numbers: 2 mm
Lower-case letters: 1.6 mm.



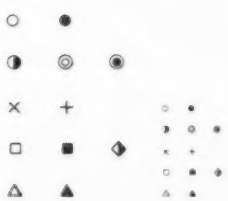
①



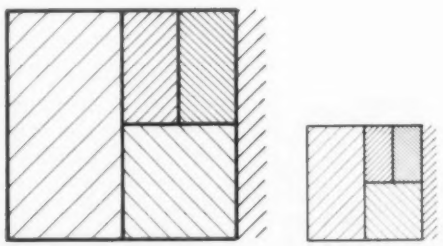


②

samples 1 to 5 show the original size and reduction × 50%



③



④

ABCDEFGHIJKLMNOPQRSTUVWXYZ
aabcdefghijklmnopqrstuvwxyz
1234567890 1·5° III IV VIII IX ∞ % ≈
[(=−+×÷ !?:" ",)] (A) (B) (a) (b)

⑤

ABCDEFGHIJKLMNOPQRSTUVWXYZ
aabcdefghijklmnopqrstuvwxyz
1234567890 1·5° III IV VIII IX ∞ % ≈
[(=−+×÷ !?:" ",)] (A) (B) (a) (b)

Selection of Illustration Material for Halftones (photographs, micrographs, X-rays, instrument traces etc.).

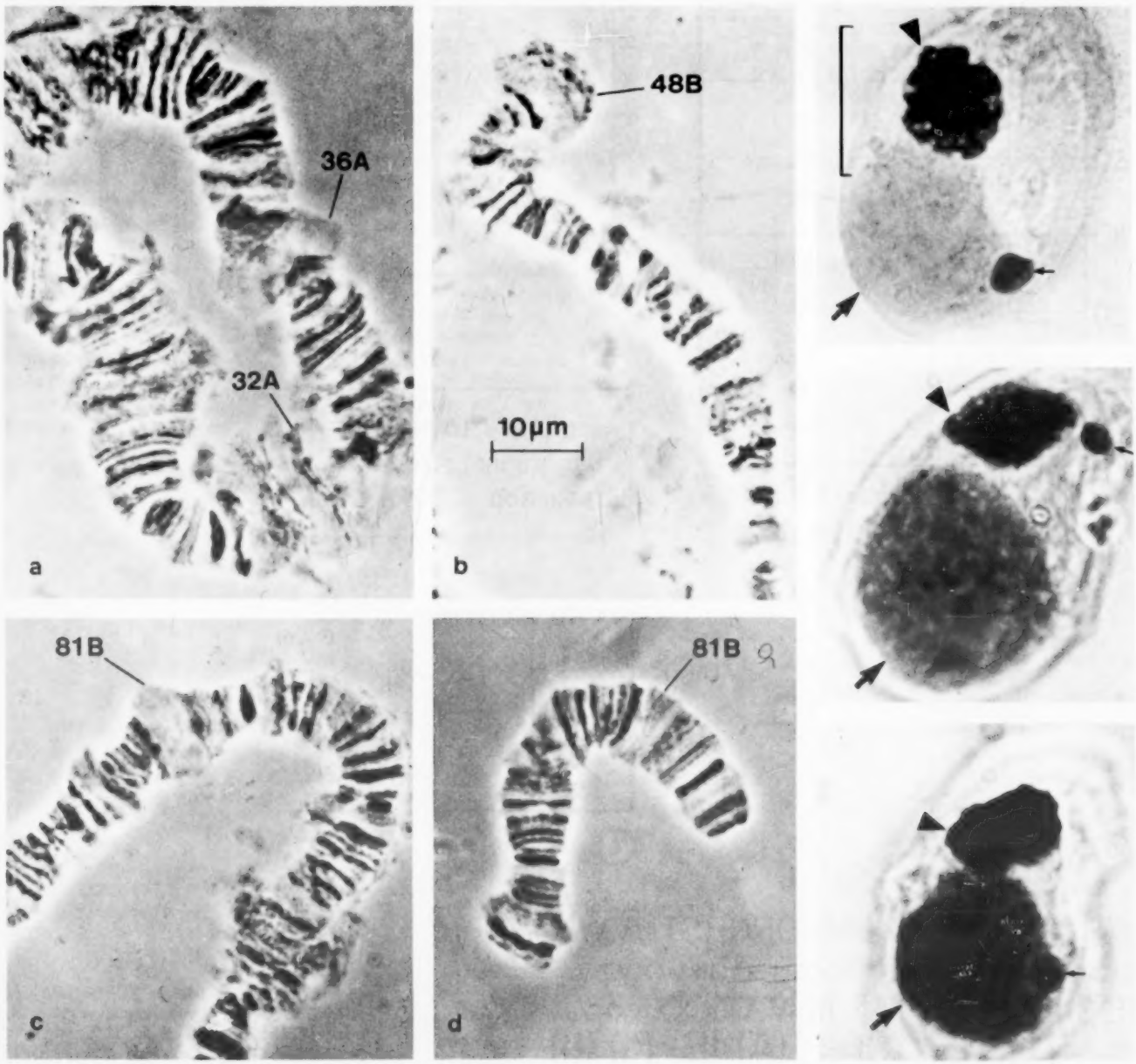
Photographs should be sharp, well-contrasted glossy prints of the original negative, trimmed at right angles. Halftone illustrations should be prepared to fit the format of the printed page (print area) so that 1 : 1 reproduction is possible. But if reduction is absolutely necessary, please state the desired scale.

Mark or crop marginal portions which are not required (at right angles, please).

Please see that illustrations that are to appear together are mounted accordingly as plates and that they correspond. Also they should not exceed the print area of the page, including room for the legend.

With X-rays, please indicate the significant parts on the back of the copy, or on an overlay.

Inscriptions, marks and scale lines should preferably be drawn neatly in black ink in an appropriate size on the face of the illustrations. Inscriptions should be about 3 mm high. Where Letraset is used, please handle it carefully and protect the photographs with an overlay.



Reviews of Physiology, Biochemistry and Pharmacology

formerly
Ergebnisse der Physiologie, biologischen Chemie und experimentellen Pharmakologie

Editors: R. H. Adrian, E. Helmreich, H. Holzer, R. Jung, K. Kramer, O. Krayer, R. J. Linden, F. Lynen, P. A. Miescher, J. Piiper, H. Rasmussen, A. E. Renold, U. Trendelenburg, K. Ullrich, W. Vogt, A. Weber

This series presents rapid and comprehensive information on topical problems and research in progress over the entire range of physiology, biochemistry and pharmacology. An international group of editors is responsible for inviting experts in these fields to submit contributions. Every year 3 to 4 volumes are published. The language of publication is English.

Volume 70
23 figures. IV, 174 pages. 1974
Cloth DM 88,—; US $38.80 ISBN 3-540-06716-7

Contents:
C. Bauer: On the Respiratory Function of Haemoglobin.
M. P. Blaustein: The Interrelationship between Sodium and Calcium Fluxes across Cell Membranes.
H. Blaschko: The Natural History of Amine Oxidases.

Volume 71
70 figures. IV, 164 pages. 1974
Cloth DM 98,—; US $43.20 ISBN 3-540-06939-9

Contents:
E. Simon: Temperature Regulation: The Spinal Cord as Site of Extrahypothalamic Thermoregulatory Functions.
K. Decker, D. Keppler: Galactosamine Hepatitis: Key Role of the Nucleotide Deficiency Period in the Pathogenesis of Cell Injury and Cell Death.
R. K. Ockner, K. J. Isselbacher: Recent Concepts of Intestinal Fat Absorption.

Volume 72
60 figures. IV, 175 pages. 1975
Cloth DM 112,—; US $49.30 ISBN 3-540-07077-X

Contents:
A. I. Shapovalov: Neuronal Organization and Synaptic Mechanisms of Supraspinal Motor Control in Vertebrates.
G. K. Moe: Evidence for Reentry as a Mechanism of Cardiac Arrhythmias.
N. Katunuma: Regulation of Intracellular Enzyme Levels by Limited Proteolysis.
K. Brew, R. L. Hill: Lactose Biosynthesis.

Volume 73
49 figures. VI, 178 pages. 1975
Cloth DM 98,—; US $43.20 ISBN 3-540-07357-4

Contents:
W. Hasselbach: Hans Hermann Weber, 1896—1974.
E. de Robertis: Synaptic Receptor Proteins. Isolation and Reconstitution in Artificial Membranes.
A. Melander, L. E. Ericson, F. Sundler, U. Westgren: Introthyroidal Amines in the Regulation of Thyroid Activity.
J. Haase, S. Cleveland, H.-G. Ross: Problems of Postsynaptic Autogenous and Recurrent Inhibition in the Mammalian Spinal Cord.
I. S. Kulaev: Biochemistry of Inorganic Polyphosphates

Volume 74
60 figures, 10 tables. IV, 200 pages. 1975
Cloth DM 97,—; US $42.70 ISBN 3-540-07483-X

Contents:
F. E. Bloom: The Role of Cyclic Nucleotides in Central Synaptic Function: Introduction. The Nature of Chemical Communication between Nerve Cells. The Components of a Cyclic Nucleotide-Mediated Hormone-Triggered Event. The Assessment of Neurobiologic Events Which may be Mediated by Cyclic Nucleotides. Cyclic AMP and Catecholamine-Mediated Synaptic Events. Cyclic Nucleotides and Other Neurobiological Functions. Conclusions. Acknowledgements. References.
S. Silbernagl, E. C. Foulkes, P. Deetjen: Renal Transport of Amino Acids: Introduction. Classification of Naturally Occurring Amino Acids. Evaluation of Experimental Techniques. In vitro Results. Peritubular Transport of Amino Acids in vivo. Amino Acid Reabsorption. Summary and Conclusions. References.

Volume 75
21 figures, 5 tables. VI, 200 pages. 1976
Cloth DM 118,—; US $52.00 ISBN 3-540-07639-5

Contents:
E. Hofmann: The Significance of Phosphofructokinase to the Regulation of Carbohydrate Metabolism.
H. Grunicke, B. Puschendorf, H. Werchau: Mechanism of Action of Distamycin A and Other Antibiotics with Antiviral Activity.
A. E. Lambert: The Regulation of Insulin Secretion.
Author Index. — Subject Index. — Indexed in Current Contents.

Prices are subject to change without notice

Springer-Verlag
Berlin Heidelberg New York

1082 4,1

Subscription Information
Volume 42 (6 issues) will appear in 1977. Sample copies available upon request.

North America
1977. US $ 44.80, including postage and handling. Subscriptions are entered with prepayment only.
Send your order or request to your bookseller or to:
Springer-Verlag New York Inc.,
175 Fifth Avenue
New York, NY 10010

All countries (except North America)
1977: DM 100,–, plus postage and handling. Send your order or request to your bookseller or to:
Springer-Verlag
P.B. 10 52 80
D-6900 Heidelberg 1

Heinz Holter, Hans Klenow, Ebba Lund, editors
Martin Ottesen, Diter von Wettstein, Carlsberg Laboratory
Erik Zeuthen, Biological Institute of the Carlsberg Foundation

Carlsberg Research Communications are the continuation of Comptes Rendus des Travaux du Laboratoire Carlsberg which has been published since 1878. The previous volumes of the journal contain the results of the work carried out at the scientific institutions of the Carlsberg Foundation. Through this journal were made known e.g. Kjeldahl's method for nitrogen determination, S.P.L. Sørensen's concept of pH, Schmidt's discovery of eel migration, Winge's discovery of sexuality in yeast, and Linderstrøm-Lang's concepts of protein structure and enzyme function.

Also in the future, the Carlsberg Research Communications will inform comprehensively about the scientific work of the Carlsberg research establishments. These include the Departments of Chemistry and Physiology of the Carlsberg Foundation, the Departments of Brewing Chemistry, Biotechnology and Technology of the Carlsberg Research Laboratory. In keeping with established tradition, these laboratories are involved in fundamental and applied research in the fields of biochemistry, cell and molecular biology, genetics, microbiology, plant and animal physiology.

Contents of Volume 41, Number 1-3

J. T. Johansen, K. Breddam, M. Ottesen: Isolation of Carboxypeptidase Y by Affinity Chromatography

Birthe Kramhøft, Susanne B. Nissen, Erik Zeuthen: The Cell Cycle in Heat- and Selection-Synchronized Schizosaccharomyces Pombe

Robert M. Smillie, Knud W. Henningsen, Niels C. Nielsen, Diter von Wettstein: The Influence of Cations and Methylamine on Structure and Function of Thylakoid Membranes from Barley Chloroplasts

Steffen Strøbæk, Gregory C. Gibbons: Ribulose-1,5-Diphosphate Carboxylase from Barley (Hordeum Vulgare). Isolation, Characterization, and Peptide Mapping Studies of the Subunits

Jack T. Johansen: Isolation of Human Carbonic Anhydrase B and C and Apocarbonic Anhydrase by Affinity Chromatography

Leif Rasmussen, Eduardo Orias: Dual Capacity for Nutrient Uptake in Tetrahymena Importance of the Oral Uptake System for FE and CU Uptake

Finn Schmidt, Bent Stig Enevoldsen: Gel Filtration Chromatography of Oligosaccharides. Comparative Studies of a-1,4, a-1,6 and a-1,4:a-1,6 Linked Oligosaccharides Composed of Glucose

Ib Svendsen: Buoyant Titration of Bovine Mercaptalbumine Chemically Modified at the Carboxyl Groups

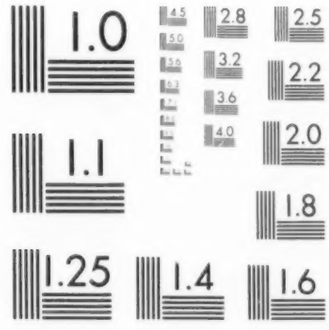
Kaye Brock, C. Gamani Kannangara: Properties and Morphology of Barley Embryo Acetyl CoA Carboxylase

Ib Svendsen: The Hydrolysis of the Three Clupein Components by Subtilisin Novo, Subtilisin Carlsberg and Nitrated Subtilisin Carlsberg

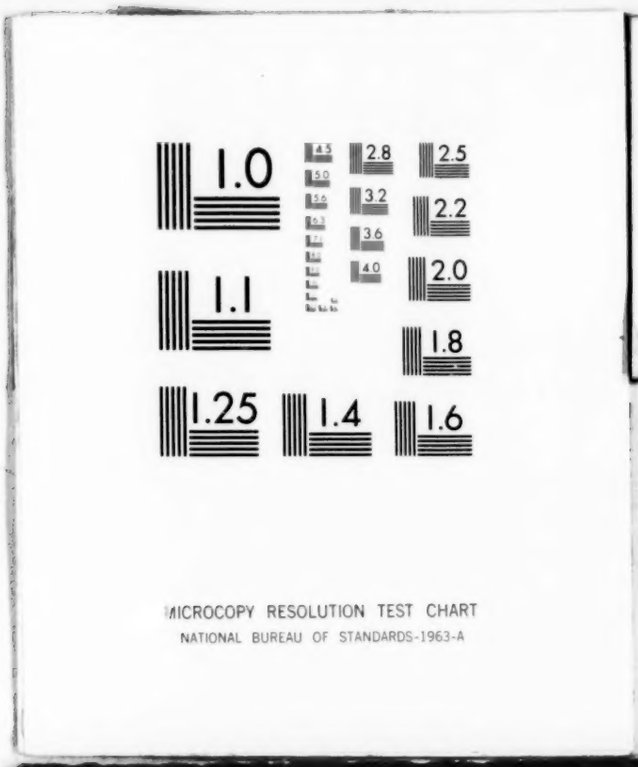
Leif Rasmussen: Nutrient Uptake in Tetrahymena Priformis

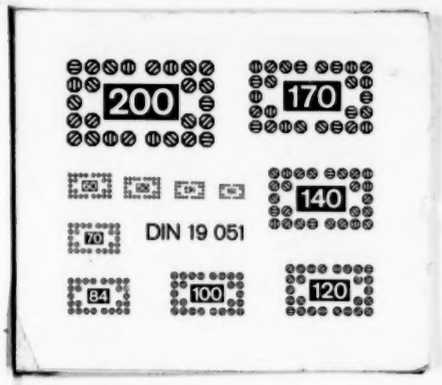
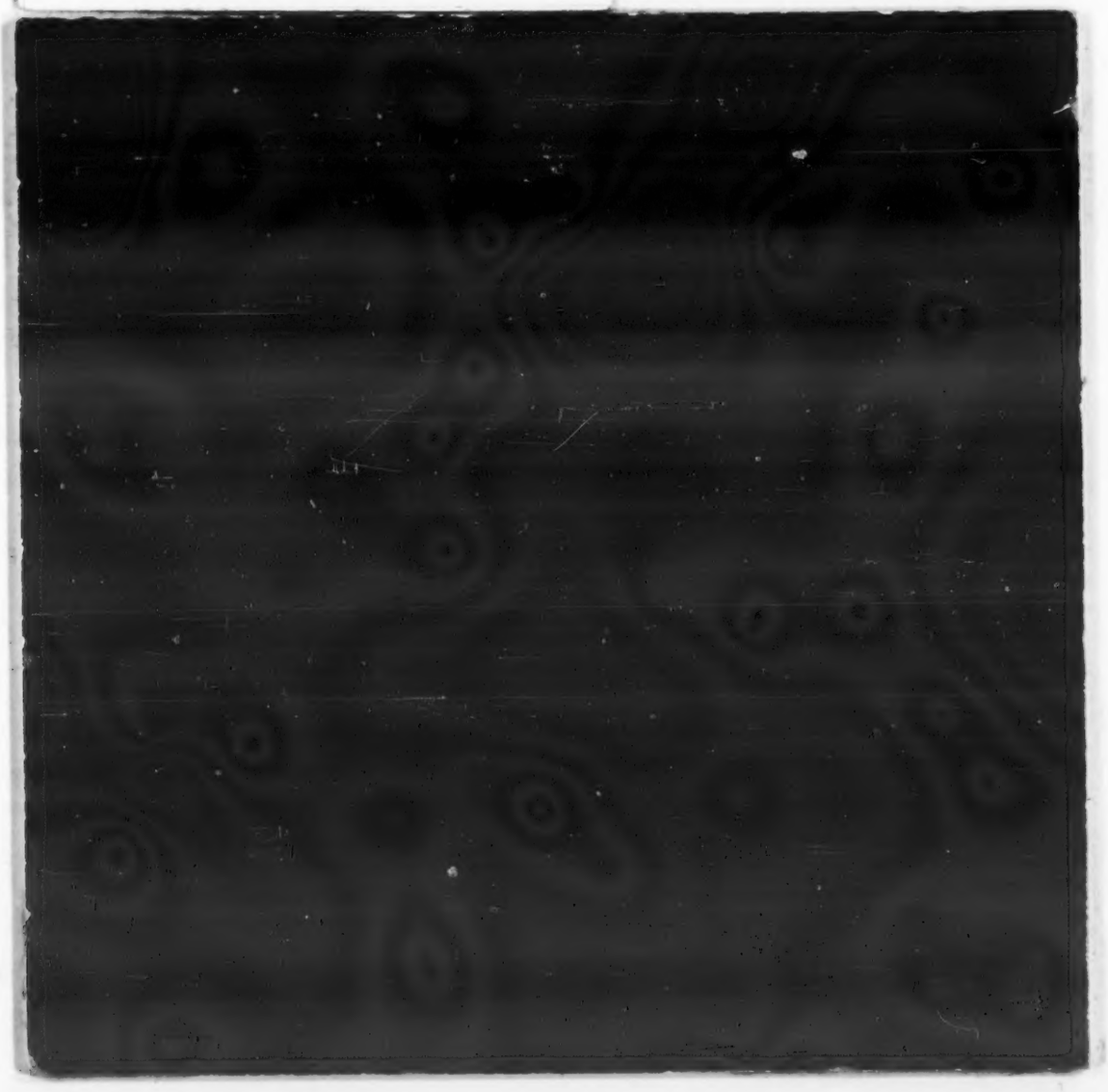
Published by
The Carlsberg Laboratory, Copenhagen
Distributed by
Springer-Verlag
Berlin Heidelberg New York

5001/4/1



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A


1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6
6.3
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A


200
170
140
DIN 19 051
120